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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,265	11/28/2000	Bruce Marvin Held	N1205-008	7900

7590

07/22/2002

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EXAMINER

HELMER, GEORGIA L

ART UNIT

PAPER NUMBER

1638

DATE MAILED: 07/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/724,265

Applicant(s)

HELD ET AL.

Examiner

Georgia L. Helmer PhD

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 and 56-65 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-15 and 56-65 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following invention sets is required under 35 U.S.C. 121:
 - I. Claims 1-20 and 56-65 drawn to methods for the introduction of molecules into a cell, classified in class 800, subclass 278.
 - II. Claims 21-29, drawn to plants, classified in class 800, subclass 295.
 - III. Claim 30, drawn to a method of enhancing embryogenic callus production using phytic acid, classified in class 435, subclass 430.1.
 - IV. Claim 31-34, drawn to a method of enhancing embryogenic callus production using coconut milk, classified in class 435, subclass 430.1.
 - V. Claim 35 and 36, drawn to a method of enhancing embryogenic callus production using phytic acid and coconut milk, classified in class 435, subclass 430.1.
 - VI. Claim 37 and 43, drawn to a method of Group I where the medium further comprises phytic acid, classified in class 800, subclass 278.
 - VII. Claims 38-40, drawn to a method of Group I where the medium further comprises coconut milk, classified in class 800, subclass 278.
 - VIII. Claims 41 and 42, drawn to a method of Group I where the medium further comprises phytic acid and coconut milk, classified in class 800, subclass 278.

IX. Claims 44-51 and 55, drawn to an apparatus, classified in class 435, subclass 283.1.

2. If invention Group I above is elected, restriction to one of the following is also required under 35 USC 121. Therefore, election is also required of one of (A) through (E) and one of inventions (a) through (c).

Molecules selected from the group:

- (A) Carbohydrates.
- (B) Nucleotide sequences.
- (C) Plant growth regulators.
- (D) Peptides.
- (E) Combinations thereof.

A cell selected from the group

- (a) Plant cell.
- (b) Animal cell.
- (c) Bacterial cell.

3. If any of inventions Group II, VI-VIII above is elected, restriction to one of the following is also required under 35 USC 121. Therefore, election is also required of one of (A) through (E).

Molecules selected from the group:

- (A) Carbohydrates.

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- (B) Nucleotide sequences.
- (C) Plant growth regulators.
- (D) Peptides.
- (F) Combinations thereof.

4. Inventions (A) through (E) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are distinguished in that each method uses a different material which is unrelated structurally and functionally.

Moreover, (A) Carbohydrates are used biotic energy sources, and for altering the level of secondary metabolites; (B) nucleotide sequences are metabolites not only in protein production but also in DNA hybridization; (C) plant growth regulators are used as hormones in the plant; (D) peptides as used as enzymes; and (E) is a combination thereof.

5. Inventions (a), (b) and (c) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are distinguished in that each method uses a different host, which is unrelated structurally and functionally. In the instant case, the different inventions (a)/(b) have a different mode of operation than (c) since (a)/(b) are cells from a multicellular organism and in nature are associated with other similar cells, whereas (c) is a cell of a unicellular organism, which in nature

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functions on its own. Moreover, invention (a) and (b) are unrelated since they have different effects: (a), the plant cells use sunlight to synthesize complex carbon compounds from very simple precursors, whereas (b) the animal cells break down complex carbon compounds into simple compounds.

6. Inventions II and I are related as product made and as process of making. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed could be made by another and materially different process such as by Agrobacterium transformation of plants.

7. Inventions III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention IV has separate utility such as in a process for culturing plant embryos without phytic acid. Invention III has separate utility such as in a process for culturing plant embryos without coconut milk.

8. Inventions V and III/IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not rely solely up the patentability of the subcombination as claimed for its own patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed

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does not rely solely up the patentability of the subcombination as claimed for its own patentability as evidenced by the presence of claims to two subcombinations, both of which are combined in the combination. The subcombinations have separate utility in that each may be used alone. See MPEP § 806.05(d).

9. Inventions VI and VII are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention VI has separate utility such as in a process for culturing plant embryos without coconut milk. Invention VII has separate utility such as in a process for culturing plant embryos without phytic acid.

10. Inventions VIII and VI/VII are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not rely solely up the patentability of the subcombination as claimed for its own patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not rely solely up the patentability of the subcombination as claimed for its own patentability as evidenced by the presence of claims to two subcombinations, both of which are combined in the combination. The subcombinations have separate utility in that each may be used alone. See MPEP § 806.05(d).

11. Inventions IX and II are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the

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apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the product can be made by another means, requiring only *Agrobacterium tumefaciens* as a biological vector.

12. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and the literature and sequence searches required for each of the Groups are not required for another of the Groups, restriction for examination purposes as indicated is proper.

13. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

14. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Georgia L. Helmer whose telephone number is 703-308-7023. The examiner can normally be reached on 8:30 - 5:00.

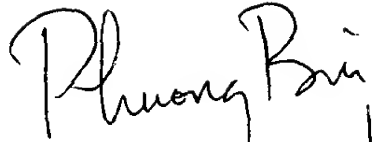
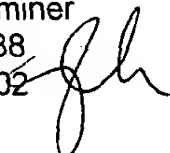
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on 703-306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

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Georgia L. Helmer PhD
Patent Examiner
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July 15, 2002


7/17/02
PHUONG T. BUI
PRIMARY EXAMINER